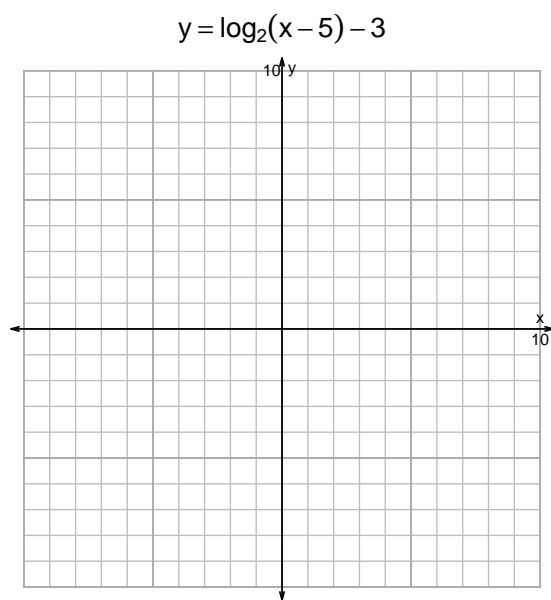
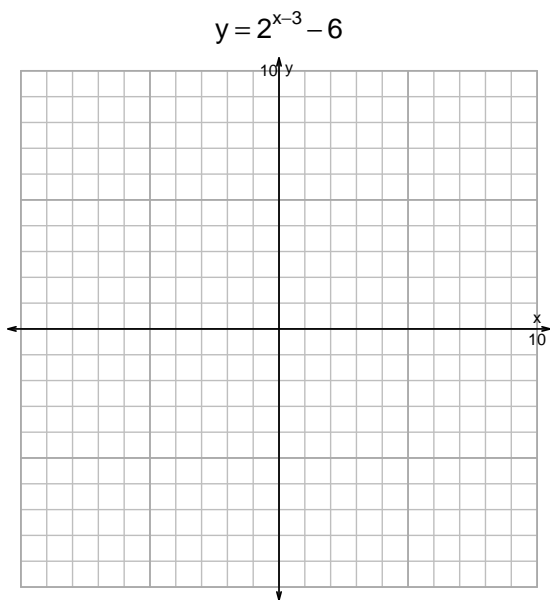


Name: \_\_\_\_\_

Date: \_\_\_\_\_

S18QUIZ: EXP LOG (PRACTICE v101)

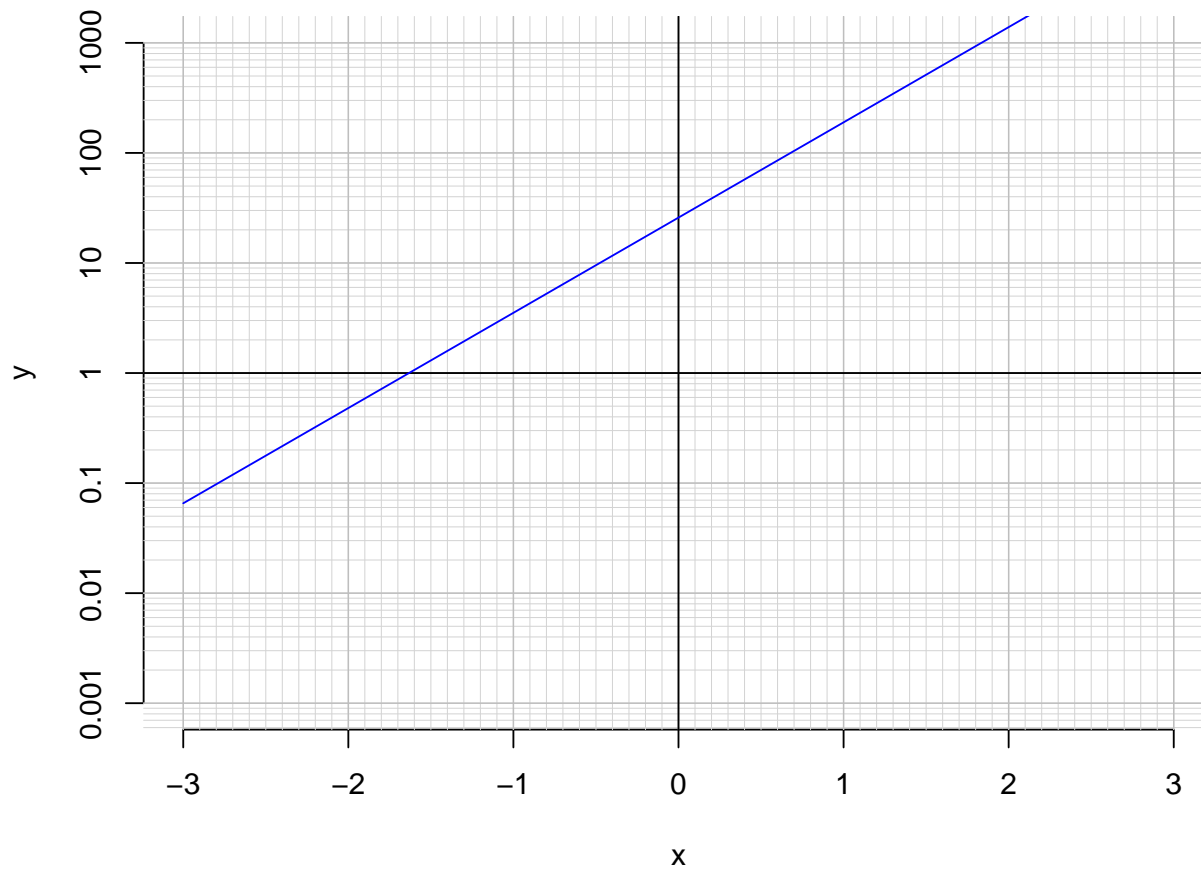
1. Graph  $y = 2^{x-3} - 6$  and  $y = \log_2(x - 5) - 3$  on the grids below. Also, draw any asymptotes with dotted lines.



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$17 = \left(\frac{4}{5}\right) \cdot 2^{-7t/3}$$

3. An exponential function  $f(x) = 25.8 \cdot e^{1.99x}$  is graphed below on a semi-log plot.



- a. Using the plot above, evaluate  $f(-2.9)$ .

- b. Express  $f^{-1}(x)$ , the inverse of  $f$ .

- c. Using the plot above, evaluate  $f^{-1}(70)$ .